

## QUALITY PROCEDURE

Title:

**Peer Review Process**

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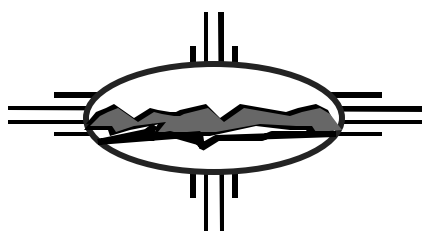
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# ER PROJECT

### APPROVALS FOR USE

Author's Name (Print):

**Kelly Black**

Author's Signature:

**Signature on file**

Date:

**5/25/99**

Quality Program Project Leader's Name (Print)

**Larry Maassen**

Quality Program Project Leader's Signature

**Signature on file**

Date:

**5/25/99**

ER Program Manager's Name (Print)

**Julie A. Canepa**

ER Program Manager's Signature

**Signature on file**

Date:

**5/25/99**

*LOS ALAMOS NATIONAL LABORATORY*

# Peer Review Process

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# Peer Review Process

**NOTE:** Environmental Restoration (ER) Project personnel may produce paper copies of this procedure printed from the controlled document electronic file. However, it is their responsibility to ensure that they are trained on and utilizing the current version of this procedure. The procedure author may be contacted if text is unclear.

## 1.0 PURPOSE

This Quality Procedure (QP) documents the peer-review process for the Los Alamos National Laboratory (Laboratory) ER Project. This process has two main objectives. The reviews are first and foremost intended to directly ensure the quality, technical soundness, and consistency of documents produced by the ER Project. Secondly, involvement of all Laboratory ER Project members in this process is intended as a tool by which project teams, and members of those teams, will improve the quality and consistency of their own documents through recognition of the problems raised in previous reviews.

## 2.0 DEFINITIONS

- 2.1 Decision peer review— A review that occurs before document writing has begun. The focus of this review is on the appropriateness of the stated objectives for the identified problem, adequacy of the proposed approach to address the objectives, and identification of concerns and necessary contingencies. Any decision that is expected to lead to the writing of a document listed in Table 4.1-1 of QP-4.9, Document Development and Transmittal Process: Peer Review Required, will be subject to this review.
- 2.2 Document peer review— A review of a completed draft of a document. Because this review follows the decision-review stage, the approach should already be agreed upon. Thus, the focus of this review is on clarity of presentation and consistent, appropriate format and content in addition to approach. This review may be in the form of a panel review or a read review. Any document listed in Table 4.1-1 of QP-4.9, Document Development and Transmittal Process: Peer Review Required, will be subject to this review.
- 2.3 Panel review— A review that includes a meeting with the authors and the reviewers for a discussion of the issues. This may be either a decision or document review.
- 2.4 Read review— A review of the written document that each reviewer conducts individually—without meeting as a group.

- 2.5 Peer review draft— The version of a document that is ready for peer review and includes a cover letter as described in Section 4.0 of QP-4.9, Document Development and Transmittal Process: Peer Review Required.

### **3.0 RESPONSIBLE PERSONNEL**

The following personnel are responsible for activities identified in Section 4.0 of this procedure.

- 3.1 ER Project Team Leaders – Responsible for requesting peer reviews of decisions and documents.
- 3.2 Authors — Responsible for bringing issues of potential concern with a decision/document to the awareness of the reviewers, bringing key team members to panel reviews so that relevant questions raised by the panel may be discussed and answered, and addressing and incorporating peer-review recommendations.
- 3.3 Reviewers — Responsible for reviewing decisions/documents thoroughly, with particular emphasis on issues pertaining to their area of expertise. They are empowered, with the other reviewers on the panel, to make enforceable recommendations to the authors on whether or not the proposed activities/documents are necessary and appropriate, and on the technical defensibility and rationale for the activities/documents. In addition, reviewers are expected to provide a thorough review of documents for readability and the coherent presentation of data and arguments.
- 3.4 Peer Review Chairperson — Responsible for facilitating panel reviews, documenting peer review panel recommendations, and coordinating with the author to ensure that all recommendations are resolved.
- 3.5 Peer Review Coordinator — Responsible for coordinating reviews and maintaining peer-review records.
- 3.6 Peer Review Task Leader — Responsible for selecting peer-review panels and ensuring that the panels perform effectively, determining the need for panel vs. read reviews, and producing periodic lists of lessons learned through peer reviews.
- 3.7 ESH-19 RCRA Compliance Specialist — Responsible for ensuring that decisions/documents comply with RCRA (Resource Conservation and Recovery Act).
- 3.8 Regulatory Compliance Deployed Personnel — Responsible for ensuring that decisions/documents follow all agreements between the ER Project and its regulators and other stakeholders, documents are written as the proper type of report, and documents follow the currently approved outline for that type of report.

## 4.0 PROCEDURE

An overview of the peer-review process is diagrammed in the Peer Review Process Flow Chart (Attachment A). This QP provides details of the process.

### 4.1 Decision Peer Review Requests

#### 4.1.1 Request Decision Review

4.1.1.1 The **author** and technical team determine that a decision has been reached on how to proceed on a particular project. If selection of the proposed option is not clear, the author should be prepared to propose the preferred alternative and discuss other options that have been considered.

4.1.1.2 After discussion with the author, an **ER Project team leader** requests a decision peer review for the project by completing and electronically submitting the Peer Review Request form (Attachment B) to *er-peerreview@lanl.gov*. (This form need not be submitted by the team leader personally if verbal approval for the request is provided to the peer review coordinator.)

#### 4.1.2 Form Decision Peer Review Panel

4.1.2.1 The **peer review task leader** reads the request form and discusses any ambiguities with the requester.

4.1.2.2 The **peer review task leader** then assigns a panel chairperson and panel of reviewers with expertise in a variety of fields which are pertinent to the project. The panel will consist of three or more reviewers, depending on the complexity and importance of the project. For regulatory deliverables, the peer review task leader will include an ESH-19 reviewer and a Regulatory Compliance deployed reviewer in the panel.

#### 4.1.3 Organize Decision Peer Review Panel

4.1.3.1 The **peer review coordinator** works with the requester and the chairperson to select an acceptable date and time for the review. Reviewers are contacted and their participation is requested.

4.1.3.2 The **author** provides a brief set of issues, concerns, and basic information about the project to the peer review coordinator who, in turn, provides that information to the reviewers.

## 4.2 Decision Peer Reviews

### 4.2.1 Present the Project to the Peer Review Panel

- 4.2.1.1 The **author(s)** begin the decision peer review with a presentation on the project. The presentation should identify any key issues or points of concern to the project team, as well as stating the particular decision proposed by the project team.
- 4.2.1.2 The **authors** must provide sufficient information for the reviewers to be comfortable discussing the proposed decision. The duration of the presentation may vary from a few minutes to an hour, depending on the complexity of the project.
- 4.2.1.3 The reviewers should ask clarifying questions during the presentation as necessary.

### 4.2.2 Discuss the Project

- 4.2.2.1 The panel **chairperson** notes any recommendations agreed to by the review panel during the discussion.
- 4.2.2.2 At the conclusion of the panel review, the chairperson reads aloud all recommendations, asks if any issues that were discussed and resolved are missing from the list of recommendations, and asks if all reviewers are in agreement with the existing list.
- 4.2.2.3 When concurrence is achieved, the meeting is adjourned.

### 4.2.3 Summarize the Decision Review

- 4.2.3.1 The panel **chairperson** prepares a formal summary report to document all recommendations made by the review panel.
- 4.2.3.2 The panel **chairperson** will distribute this summary report to everyone who was present at the review within three workdays.
- 4.2.3.3 If any **reviewers** or **authors** disagree with the contents of the summary report, they must raise their concerns to the chairperson within two days.

### 4.2.4 Incorporate the Decision Peer Review Comments

- 4.2.4.1 The **author** must incorporate all peer-review recommendations as they appear on the summary report.

- 4.2.4.2 Direct any questions that arise to the chairperson. The chairperson may bring questions back to the review panel or to individual reviewers if further clarification is necessary.
- 4.2.4.3 If the author and chairperson are not able to resolve a particular issue, that issue may be raised to the Project Management Team (PMT) through the peer review comment resolution process as outlined in Section 4.6 of this QP.

### 4.3 Document Peer Reviews

#### 4.3.1 Request Document Review

- 4.3.1.1 **Author** prepares a peer review draft of the document.
- 4.3.1.2 After discussion with the task leader, an **ER Project team leader** requests a document peer review for the project by completing and electronically submitting the Peer Review Request form (Attachment B) to *er-peerreview@lanl.gov*. (This form need not be submitted by the team leader personally if verbal approval for the request is provided to the peer review coordinator.)

#### 4.3.2 Organize the Document Review

- 4.3.2.1 When a request for a document review is received, the **peer review task leader** reviews the request and discusses any ambiguities with the requester.
- 4.3.2.2 Depending on the complexity of the project, and on the outcome of the decision review for the particular project, the **peer review task leader** determines whether a panel or read review is most appropriate.
- 4.3.2.3 The **peer review task leader** then assigns a peer review panel chairperson and a set of reviewers with expertise in a variety of fields that are pertinent to the project. Most or all of the reviewers will be those who attended the decision review for the project. The panel will consist of three or more reviewers, depending on the complexity and importance of the project being reviewed. For regulatory deliverables, the peer review task leader will include an ESH-19 reviewer and a Regulatory Compliance deployed reviewer in the panel.
- 4.3.2.4 The **peer review coordinator** works with the requester and the panel chairperson to arrange the review.

- 4.3.2.5 The **peer review coordinator** contacts the reviewers and their participation is requested.

#### 4.4 Panel Reviews

##### 4.4.1 Provide Information to the Reviewers

- 4.4.1.1 The **author** provides the document to each of the reviewers at least one week before a panel review.
- 4.4.1.2 The **author** provides a brief set of issues, concerns, and basic information about the project to the **peer review coordinator** who, in turn, provides that information to the reviewers .
- 4.4.1.3 Each **reviewer** reads the entire document, with a focus particularly (but not exclusively) on their area of expertise, before the panel meeting.

**Note:** If a reviewer commits to attending the review, but cannot be present, that reviewer is responsible for working with the peer review coordinator to either find a replacement or a different time to provide their input.

##### 4.4.2 Present the Document to the Peer Review Panel

The **author** begins the document peer review with a brief presentation on the project. The presentation should identify any key issues or points of concern to the project team. The presentation should not be more than 15 minutes because the reviewers will have already read the document.

##### 4.4.3 Discuss the Document

- 4.4.3.1 The panel **chairperson** leads the panel discussion and facilitates an interactive review of the document.
- 4.4.3.2 The panel **chairperson** notes any recommendations agreed to by the review panel during the discussion.
- 4.4.3.3 At the conclusion of the panel review, the panel **chairperson** reads aloud all recommendations, asks if any issues that were discussed and resolved are missing from the list of recommendations, and asks if all reviewers are in agreement with the existing list.
- 4.4.3.4 When concurrence is achieved, the meeting is adjourned. If reviewers have made additional comments on the document, a copy of the document should be given to the author.



#### 4.4.4 Summarize the Document Review

The panel **chairperson** prepares a formal summary report of all recommendations made by the review panel.

The panel **chairperson** will distribute this summary report to everyone who was present at the review within three workdays.

If any **reviewers** or **authors** disagree with the contents of the summary report, they must raise their concerns to the chairperson within two days.

#### 4.4.5 Incorporate the Document Peer Review Comments

4.4.5.1 The **author** must incorporate all peer review recommendations as they appear on the summary report.

4.4.5.2 The **author** should also read and incorporate comments from the hard copies of the documents, as appropriate.

4.4.5.3 If any questions arise, the **author** will direct them to the panel chairperson. The chairperson may bring questions back to the review panel or to individual reviewers if further clarification is necessary.

4.4.5.4 If the **author** and **chairperson** are not able to resolve a particular issue, that issue may be raised to the PMT through the peer review comment resolution process as outlined in Section 4.6 of this QP.

4.4.5.5 When all comments are incorporated, the **author** summarizes the changes to the document and returns it to the chairperson.

4.4.5.6 The panel **chairperson** then looks over the document (in a timely manner) for adherence to the recommendations. If all recommendations are adequately addressed, the chairperson signs the Project Document Signature Form (see Section 4.1 of QP-4.9, Document Development and Transmittal Process: Peer Review Required, for information on how to initiate this form and how it is involved in the document-development process).

#### 4.5 Read Review

##### 4.5.1 Provide Information to the Reviewers

4.5.1.1 The **author** provides the document to each of the reviewers with at least one week to provide comments.

4.5.1.2 With the document, the **author** provides a cover memo that identifies a brief set of issues, concerns, and basic information about the project, along with the author's name, e-mail address, and telephone number.

#### 4.5.2 Submit and Compile Review Comments

4.5.2.1 The **reviewers** each read the entire document, with a focus particularly (but not exclusively) on their area of expertise.

4.5.2.2 **Reviewers** electronically record any concerns with the document on the Peer Review Comments/Resolutions forms (Attachment C). It is preferable that the reviewers complete these forms electronically, but hard copies are also acceptable. When these forms are complete, the reviewers return them to the peer review coordinator.

**Note:** All significant comments will be recorded on the Comments/Resolutions form. Editorial and less important comments may be recorded in the margins of the document.

4.5.2.3 The **peer review coordinator** brings all of these Comments/Resolutions forms and marked-up documents to the author, and also maintains copies for the peer-review files.

#### 4.5.3 Incorporate Read Review Comments

4.5.3.1 The **authors** are responsible for responding to all review comments recorded on the Peer Review Comments/Resolutions forms.

4.5.3.2 The **authors** will make brief notations of how the comment was incorporated on the Comments/Resolutions forms which are then returned to the peer review coordinator.

**Note:** Comments written on the margins of the document by reviewers should be read and incorporated by the authors, as appropriate, but response to the reviewers is not necessary for those comments.

4.5.3.3 If comments from two or more reviewers are in potential conflict, the **author** will discuss the issue with all involved reviewers to come to an agreement on the proper presentation on the information in question.

4.5.3.4 If the author and reviewers have difficulty resolving a particular issue, it should then be raised to the panel **chairperson** who will work with them to come to resolution.

- 4.5.3.5 If agreement is not achieved, that issue may be raised to the PMT through the peer review comment resolution process as outlined in Section 4.6 of this QP.
- 4.5.3.6 When all comments are incorporated, the **author** brings the revised document and the completed Peer Review Comments/Resolutions forms to the panel chairperson.
- 4.5.3.7 The panel **chairperson** then checks the document for adherence to the recommendations. If all recommendations are adequately addressed, the chairperson signs the Project Document Signature Form.

#### 4.6 Peer Review Comment-Resolution Process

In the event that an issue cannot be resolved between the author and the peer review chairperson, it may occasionally be necessary to raise the issue to a third party. To that end, the following comment-resolution process has been established.

- 4.6.1 **Author** and peer review **chairperson** work together to resolve all issues.
- 4.6.2 If an issue remains unresolved, the **author** and peer review **chairperson** together raise it to the attention of the ER Project Team Leader. The **Team Leader** then brings the issue to the appropriate Focus Area Leader. The Focus Area Leader then puts the issue on the agenda for the next PMT meeting.
- 4.6.3 At this PMT meeting, the **author** and peer review **chairperson** will introduce the topic, and the PMT will discuss and resolve the issue.

#### 4.7 Peer Review Lessons Learned

The **peer review task leader** will compile lists of issues raised or resolved during decision and document peer reviews that may be of interest to other members of the ER Project. These lists will be distributed periodically to the entire ER Project.

### 5.0 RECORDS

**Note:** The only record modified as a result of implementing this procedure is the ER Project Document Signature Form which is generated and explained in QP-4.9, Document Development and Transmittal Process: Peer Review Required.

## **6.0 TRAINING**

All users of this QP are trained by self-study, and the training is documented in accordance with QP-2.2, Personnel Orientation and Training.

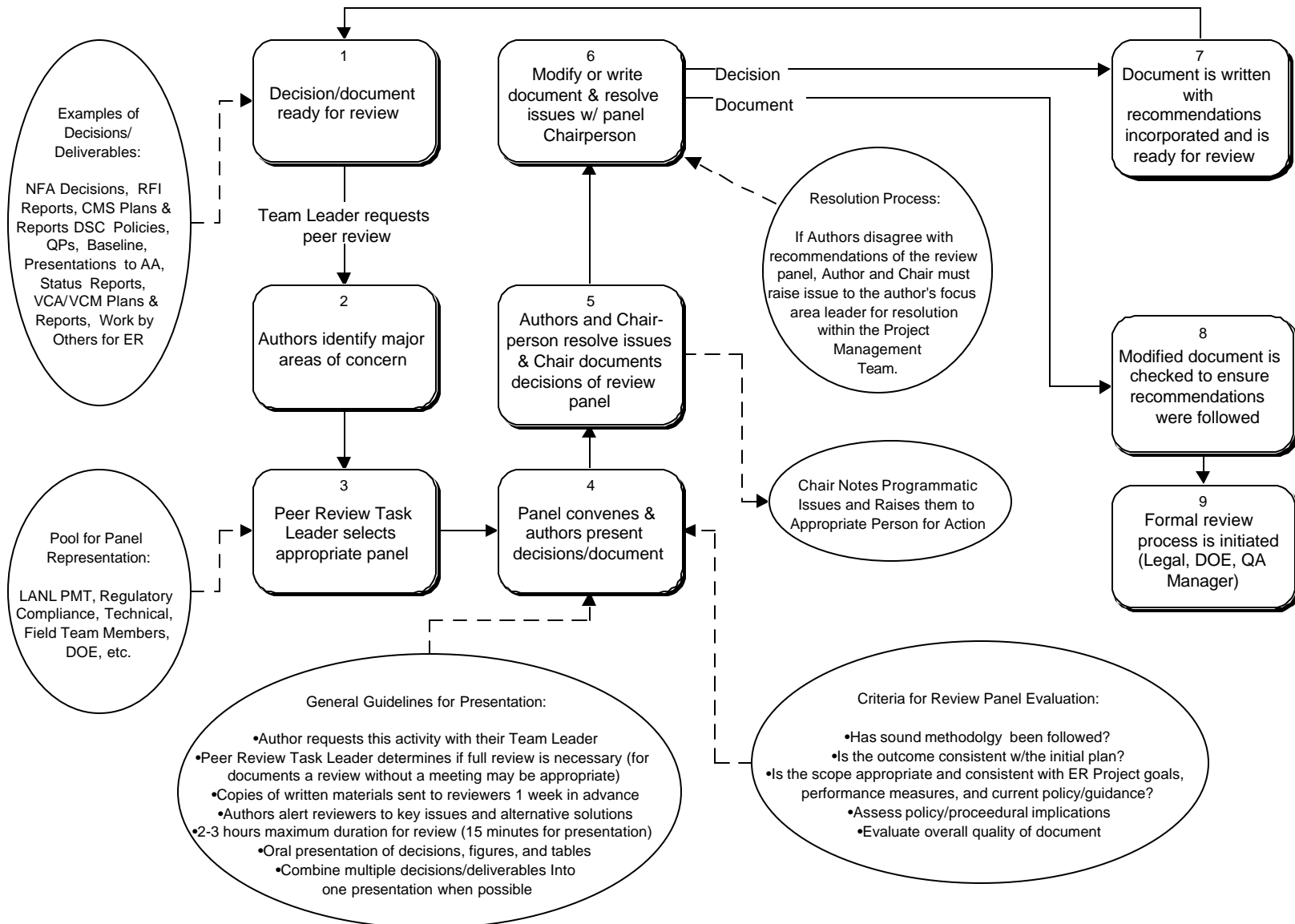
## **7.0 ATTACHMENTS**

Attachment A: Peer Review Process Flow Chart (1 page)

Attachment B: Peer Review Request (2 pages)

Attachment C: Peer Review Comments/Resolutions (1 page)

## Peer Review Process Flow Chart



## Peer Review Request

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### 1.0 Request for Peer Review

Date:

Requestor (must be a Team Leader):

Point of Contact:

Preferred date for peer review: First choice:

Second choice:

Document Title:

Type of review (please check all that apply): ☐ Decision ☐ Document ☐ Read ☐ Panel ☐ Final  
☐ RFI report ☐ SAP ☐ VCA ☐ CMS ☐ Policy Paper ☐ SOP ☐ QP Other (specify):

Deliverable due date to DOE:

NMED:

Other (specify organization):

List PRS, QP, or SOP number(s) addressed in the decision/document to be reviewed:

Author/Presenters:

List technical team statistician, risk assessor (human health and ecological), geologist, hydrologist, and chemist (to help us not include them as reviewers):

Technical team is:

Brief description of site/problem/decision (3–4 sentences):

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## Peer Review Request

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### 2.0 Please Answer the Following Questions to Help Us Expedite Your Peer Review.

Yes	No	Don't Know	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are radionuclides present or thought to be present?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are bioaccumulators suspected or known to be present?
List major contaminants anticipated or known to occur:			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is ground water of potential concern?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is surface water of potential concern?
SOP – 2.01 Score:			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has eco scoping been completed?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are sites in this decision/document in proximity of other major contaminant sources?
What is the major driver for decisions? <input type="checkbox"/> Human Health Risk <input type="checkbox"/> Ecological Risk <input type="checkbox"/> Surface Water <input type="checkbox"/> Off-site migration potential <input type="checkbox"/> Other (specify):			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are field analytical techniques used or proposed?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are any non-routine analytical procedures used?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Does the report discuss any model results?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has NMED or the public raised any particular issues related to this site? If yes, briefly describe:
List and briefly describe any particular concerns or problems you wish reviewers to address: (Any decisions that you are having trouble making should be included):			
Recommended personnel for the peer review:			
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## Peer Review Comments/Resolutions

Page 1 of \_\_\_\_

**Part 1** (to be completed by the ER Program Office)

Date: \_\_\_\_\_

Title: \_\_\_\_\_ ID #: \_\_\_\_\_ - \_\_\_\_\_ Rev. #: \_\_\_\_\_

Reviewer's Name (Print): \_\_\_\_\_ Group: \_\_\_\_\_ MS: \_\_\_\_\_ Comments are due by: \_\_\_\_\_ (Date)

Return comments or questions to (Author): \_\_\_\_\_ Phone: \_\_\_\_\_ FAX: \_\_\_\_\_  
 AND Cheri Vidlak AT 667-2728 665-4747

**Part 2** (to be completed by the Reviewer)

Received on (Date): \_\_\_\_\_ Review completed on: \_\_\_\_\_ Phone: \_\_\_\_\_ Signature: \_\_\_\_\_

Comment #	Location <sup>1</sup>	M/O <sup>2</sup>	Reviewer's Comment/Suggestion	A/R <sup>3</sup>	Preparer's Proposed Revision/Resolution	Final Resolution

<sup>1</sup>page, paragraph, line

<sup>2</sup>M = mandatory / O = optional

<sup>3</sup>A = accept / R = reject

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## Peer Review Comments/Resolutions (continued)

Page \_\_\_ of \_\_\_

Title: \_\_\_\_\_ Reviewer: \_\_\_\_\_

Comment #	Location <sup>1</sup>	M/O <sup>2</sup>	Reviewer's Comment/Suggestion	A/R <sup>3</sup>	Preparer's Proposed Revision/Resolution	Final Resolution

<sup>1</sup>page, paragraph, line

<sup>2</sup>M = mandatory / O = optional

<sup>3</sup>A = accept / R = reject

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